REMARKS/ARGUMENTS

Claims 2-22 and 29-37 are currently pending in the present patent application.

The Objections to the Specification

In the Office Action mailed on October 13, 2009, the Examiner objects to claims 2-22 and 29-37 "because according to MPEP 608.01, antecedent basis for the terms appearing in the claims, while an applicant is not limited to the nomenclature used in the application as filed, he or she should make appropriate amendment of the specification whenever this nomenclature is departed from by amendment of the claims so as to have clear support or antecedent basis in the specification for the new terms appearing in the claims. Applicant will be required to make appropriate amendment to the description to provide clear support or antecedent basis for the terms appearing in the claims provided no new matter is introduced. The terms 'a hardware subsystem', 'a self-configuring application service system', 'interface communications protocol information' and 'a self-configuring interface system' are lacking clear support or antecedent basis in the description of the specification. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o)."

Applicants Attorney submits that objections to the specification are moot in light of present amendments to the claims.

The Rejections Under 35 USC § 101

In the current Office Action, the Examiner rejects claims 29-37 under 35 USC § 101 because "according to par 0036 and par 0018 of the specification that the limitation in Claim 29 does not appear to tied to another statutory class or transform underlying subject matter to a different state or thing, thus, the method/process claim does not direct to statutory subject matter."

Applicants' Attorney respectfully submits that current amendments to Claim 29 clarify that Claim 29 is tied to statutory subject matter. Accordingly, Applicants' Attorney submits that Claims 29-37 in condition for allowance.

§ 112 First Paragraph Rejection

In the current Office Action, the Examiner maintains her rejections of claims 2-22 and 29-37 under 35 USC § 112, first paragraph, as failing to comply with the written description requirement.

The Examiner asserts that "[t]he claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There are no supports within the specification stating that 'the signal database storing interface communications protocol configuration information' AND 'retrieving communication protocol interface configuration information that…'."

Independent Claims 5, 12 and 29 have been amended to remove the term 'protocol' from the clause 'the signal database storing interface communications protocol configuration information.' Accordingly, these claims as amended are supported by the specification because, as indicated by Examiner on page 2 of the Office Action, "Page 5, line 6-14 of the specification does demonstrate that 'a module' may retrieve configuration information from the signal database." Accordingly, Applicant's Attorney respectfully submits that claims 2-22 and 29-37 are therefore in condition for allowance.

§ 112 Second Paragraph Rejections

The Examiner rejects claims 2-22 and 29-37 under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The claims have been amended to clarify the antecedent basis for the cited limitations on pages 6-9 of the office action. However, on page 10 of the office action the Examiner points to specific limitations in claims 17-22, 29, 32 and 34 but does not explain the specific issues with the cited limitations, and therefore Applicants are unable to respond. The Examiner is respectfully requested to specify the issues with the language she cites in claims 17-22, 29, 32 and 34 on page 10 of the Office Action.

The Rejections Under 35 USC § 103

In the current Office Action, the Examiner rejects claims 2-22 and 29-37 under 35 USC § 103(a) as being unpatentable over US Patent No. 5,469,361 to Moyne (hereinafter "Moyne") in view of US Patent No. 5,980,078 to Krivoshein et al. (hereinafter "Krivoshein"). In response to previous arguments, the Examiner points to column 10, lines 25-27, column 21, lines 24-26, and column 22, lines 20-34 as disclosing the recited communications protocol interface configuration information.

The Examiner maintains that Krivoshein discloses a signal database that manages communication between a hardware subsystem and an application service system and a self configuring interface system such that the combination of Moyne and Krivoshein would have been obvious to one skilled in the art because it would be have been desirable for users to implement because it provides the ability to support automatic sensing of devices.

Although Krivoshein discloses a configuration database, and the configuration of devices using this database, Krivoshein merely discloses such configuration in the context of a single fixed communications protocol, with the example protocol used in Krivoshein being the FieldBus protocol. See column 17, lines 1-4.

Krivoshein fails to teach or suggest a signal database that stores communications protocol interface configuration information corresponding to a manner of managing communication between the hardware subsystem and the application services system. Krivoshein assumes communication via a single predefined standardized communications protocol. See col. 21, lines 63-67 through col. 22, lines 1-35. All the configuration information discussed therein does not relate to communications protocol information but instead relates to other configuration parameters that are communicated over an assumed predefined standardized communications protocol. For example, an element of the "configuration database" referred to as "Device Tables" are discussed as defining a variety of configuration parameters, such as CAN segment numbers, controller MAC address, IP address, subnet mask, and so on.

Claim 5

Amended claim 5 recites, in part, a system including a hardware subsystem, an application database, a self-configuring application services system, and a signal database storing communications interface configuration information corresponding to a manner of managing communication between the hardware subsystem and the application services system via a plurality of communication protocols.

Additionally, a self-configuring interface system is coupled to the hardware subsystem and the application services system and includes a configuration module coupled to retrieve interface configuration information from the signal database and facilitate communication between the hardware subsystem and the self-configuring application services system via a plurality of communication protocols.

Krivoshein fails to disclose or suggest a self-configuring interface system that includes a configuration module coupled to retrieve communications interface configuration information from the signal database and facilitate communication between hardware subsystem in the self-configuring application services via a plurality

of communication protocols.

Instead, the Krivoshein communication is only through a single predetermined communications protocol utilized in the digital control system of Krivoshein. The parameters in the configuration database of Krivoshein are not communications parameters relating a plurality of possible communication protocols as now expressly recited in amended Claim 5. Accordingly, the Krivoshein system is not operable to select and operate via a plurality of communication protocols as recited in Claim 5.

For these reasons, the combination of elements recited in Claim 5 is allowable. Dependent claims 2-4 and 6-11 are allowable for at least the same reasons as Claim 5 and due to the additional elements added by each of these dependent claims.

Claim 12

Independent Claim 12 recites a system including a hardware subsystem, an application database referencing a first software object that corresponds to a manner of processing information associated with an electrical signal. A self-configuring application services system includes a configuration module coupled to the hardware subsystem and is coupled to retrieve application service configuration information from the application database, and includes the first software object.

Additionally, a signal database stores communications protocol interface configuration information corresponding to a manner of managing communication between the hardware subsystem and the application services system via a plurality of communication protocols and references a second software object that corresponds to a manner of processing information associated with an electrical signal and associate an event code with the electrical signal.

Additionally, a self-configuring interface system is coupled to the hardware subsystem and the application services system and includes a configuration module coupled to retrieve the second software object and retrieve interface configuration

information from the signal database to facilitate communication between the hardware subsystem and the self-configuring application services system via a plurality of communication protocols.

Once again, the configuration database of Krivoshein does not contemplate storing communications protocol interface configuration information associated with a plurality of communications protocols but only stores predetermined communications protocol utilized in the digital control system of Krivoshein. Moreover, Krivoshein fails to teach or suggest operation via a plurality of communications protocols.

For these reasons, Moyne and Krivoshein, either alone or combined, fail to teach or suggest the elements recited in Claim 12. Dependent Claims 13-22 are allowable for at least the same reasons as Claim 12 and due to the additional limitations added by each of these dependent claims.

Claim 29

Independent Claim 29 recites a method for processing electrical signals in a system including a hardware subsystem that includes a set of components adapted to carry electrical signals, each electrical signal associated with one from the group of a sensing operation and a control operation. The method includes retrieving application service configuration information that associates a first set of software objects with at least one electrical signal and retrieving the first set of software objects in accordance with the application service configuration information.

The method further includes determining a required communications protocol from a plurality of communication protocols and selecting a communications protocol and retrieving communications interface configuration information that corresponds to the hardware subsystem and which associates a second set of software objects with at least one electrical signal and automatically generating a hardware interface for managing communication between the software object and the hardware subsystem in accordance with the communications interface configuration information, the interface

including associating an event code with each electrical signal.

Moyne and Krivoshein, either alone or combined, fail to teach or suggest selecting and retrieving communications interface configuration information based on selecting a communication protocol from a plurality of communication protocols. Instead, the configuration database of Krivoshein merely includes parameters associated with a single predetermined communications protocol utilized in the digital control system of Krivoshein and not selecting a required communications protocol from a plurality of communication protocols.

For these reasons, the combination of elements recited in Claim 29 is allowable and dependent claims 30-37 are allowable for at least the same reasons as Claim 29 and due to the additional elements added by each of these dependent claims.

The present patent application is in condition for allowance. Favorable consideration and a Notice of Allowance are respectfully requested. **Should the Examiner have any further questions about the application, Applicants respectfully request the Examiner to contact the undersigned attorney at (425) 455-5575 to arrange for a telephone interview to discuss the outstanding issues.** The Commissioner is hereby authorized to charge any deficiency of fees submitted herewith, or credit any overpayment, to Deposit Account No. 07-1897.

Respectfully submitted,
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